Approved for use through 07/31/2006, OMB 0651-0032

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## UTILITY PATENT APPLICATION **TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	ARC012010100					
First Inventor	Thomas M. BAER					
Title	APPARATUS AND METHOD FOR HEATING MICROFLUIDIC VOLUMES AND MOVING FLUIDS					
Express Mail Label No.	ER 312378994 US					

APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.	ADDRESS TO:  Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450					
1. Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) Applicant claims small entity status. See 37 CFR 1.27. 3. Specification [Total Pages 35] (preferred arrangement set forth below) - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure  4. Drawing(s) (35 U.S.C. 113) [Total Sheets 12]	<ul> <li>7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)</li> <li>8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) <ul> <li>a.  Computer Readable Form (CRF)</li> <li>b.  Specification Sequence Listing on: <ul> <li>i.  CD-ROM or CD-R (2 copies); or</li> <li>ii.  Paper</li> <li>c.  Statements verifying identity of above copies</li> </ul> </li> <li>ACCOMPANYING APPLICATION PARTS</li> <li>9.  Assignment Papers (cover sheet &amp; document(s))</li> <li>10.  Power of</li> </ul></li></ul>					
5. Oath or Declaration a. Newly executed (original or copy) b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 6. Application Data Sheet. See 37 CFR 1.76	(when there is an assignee)  11.					
	17. U Other:					
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:  Continuation  Divisional  Continuation-in-part (CIP)  of prior application No.:60/443,209  Prior application information:  Examiner Not assigned  For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.  The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.						
19. CORRESPONI						
Customer Number: 34690	OR Correspondence address below					
Name						
Address						
City	State Zip Code					
	lephone Fax					
Name (Print/Type) Rimas T. Lukas	Registration No. (Attorney/Agent) 46,451					
Signature Signature	Date January 27, 2004					

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/17 (10-03)
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G FEE TRANS	SMILIA		Application Number	Not yet assigned					
for FY 2004			Filing Date	Herewith					
Effective 10/01/2003. Patent fees are s			First Named Inventor	Thomas M. BAER					
		•	Examiner Name	Not yet assigned					
Applicant claims small entity status. See 37 CFR 1.27			Art Unit	Not yet assigned					
TOTAL AMOUNT OF PAYMENT (\$) 412.00			Attorney Docket No.	ARC012010100					
METHOD OF PAYMENT (check all that apply)			FEE CALCULATION (continued)						
Check Credit card Money	Other None	3. /	ADDITIONAL FEES		de se sego di se atraj adapte a di agai				

Attented Bocket No.   Attented 120 to 100							
METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)						
✓ Check	3. ADDITIONAL FEES						
Deposit Account:	Large Ent	tity	Small	Entity			
Deposit	Fee Fe Code (\$		Fee l Code	Fee (\$)	Fee Description		
Account Number	• • • • • • • • • • • • • • • • • • • •	· 1	2051	,	Surcharge - late filing fee or oath		
Deposit			2052		Surcharge - late provisional filing fee or		
Account Name					cover sheet		
The Director is authorized to: (check all that apply)			1053		Non-English specification		
Charge fee(s) indicated below Credit any overpayments.	1812 2,5		1812 2	•	For filing a request for ex parte reexamination		
Charge any additional fee(s) or any underpayment of fee(s)	1804 9	920*	1804	920*	Requesting publication of SIR prior to Examiner action		
Charge fee(s) indicated below, except for the filing fee	1805 1,8	B40*	1805 1	,840*	Requesting publication of SIR after		
to the above-identified deposit account.					Examiner action		
FEE CALCULATION		110	2251	55	Extension for reply within first month		
1. BASIC FILING FEE		420	2252	210	Extension for reply within second month		
Large Entity Small Entity Fee Fee Fee Fee Description Fee Paid		950	2253	475	Extension for reply within third month		
Fee Fee Fee Fee Description Fee Paid Code (\$) Code (\$)	1254 1,4	480	2254	740	Extension for reply within fourth month		
1001 770 2001 385 Utility filing fee 385.00	1255 2,0	010	2255	1,005	Extension for reply within fifth month		
1002 340 2002 170 Design filing fee	1401 3	330	2401	165	Notice of Appeal		
1003 530 2003 265 Plant filing fee	1402 3	330	2402	165	Filing a brief in support of an appeal		
1004 770 2004 385 Reissue filing fee	1403 2	290	2403	145	Request for oral hearing		
1005 160 2005 80 Provisional filing fee	1451 1,5	510	1451	1,510	Petition to institute a public use proceeding		
SUBTOTAL (1) (\$) 385.00	1452 1	110	2452		Petition to revive - unavoidable		
		330	2453	665	Petition to revive - unintentional		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Fee from	1501 1,3	330	2501	665	Utility issue fee (or reissue)		
Extra Claims below Fee Paid	1502 4	480	2502		Design issue fee		
Total Claims   23   -20** = 3   X   9   = 27	1503 6	640	2503	320	Plant issue fee		
Claims	1460 1	130	1460	130	Petitions to the Commissioner		
Multiple Dependent =27	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)		
Large Entity   Small Entity Fee Fee Fee Fee Fee Description	1806 1	180	1806	180	Submission of Information Disclosure Stmt		
Code (\$) Code (\$)	8021	40	8021	40	Recording each patent assignment per property (times number of properties)		
1202 18 2202 9 Claims in excess of 20	1809 7	770	2809	385	Filing a submission after final rejection		
1201 86 2201 43 Independent claims in excess of 3					(37 ČFR 1.129(a))		
1203 290 2203 145 Multiple dependent claim, if not paid	1810 7	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))		
1204 86 2204 43 ** Reissue independent claims over original patent	1801 7	770	2801	385	` "		
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802 9	900	1802	900	` '		
SUBTOTAL (2) (\$) 27.00 Other fee (specify)							
**or number previously paid, if greater; For Reissues, see above	*Reduced	d by E	Basic F	iling Fe	ee Paid SUBTOTAL (3) (\$)		

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SUBMITTED BY		Marine and the pool of the control o	and the last light with a second of the last light of	Value 1970 Carrier of the Committee of the Landson Committee of the Commit		(if applicable))	
Name (Print/Type)	Rimas T. Lukas	imas T. Lukas Registration No. (Attorney/Agent) 46,451				Telephone 650-560-0076	
Signature	Min	nollas			Date	January 27, 2004	

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